

Product Environmental Profile

Arteor

2 P+E Socket - German Standard - White



LEGRAND'S ENVIRONMENTAL COMMITMENTS

• Incorporate environmental management into our industrial sites

Of all Legrand sites worldwide, over 80% are ISO 14001-certified sites belonging to the Group for more than five years.

• Involve the environment in product design

Provide our customers with all relevant information composition, consumption, end of life, etc...

Reduce the environmental impact of products over their whole life cycle.

• Offer our customers environmentally friendly solutions

Develop innovative solutions to help our customers design more energy efficient, better managed and more environmentally friendly installations.



REFERENCE PRODUCT

Function	Allow the connection to a 250 V low voltage circuit, at a rated current not exceeding 16 A, according to the IEC 60884-1, for household or similar purposes, during 20 years.		
Reference Product			
	Cat. No. 5 721 18	Cat. No. 5 760 03	Cat. No. 5 752 10
	2 P+E German socket standard White - 16 A - 250 V	Support Frame	Plate

The company reserves the right to change specifications and designs without notice. All illustrations, descriptions, dimensions and weights in the document are for guidance and cannot be help binding on the Company.



PRODUCTS CONCERNED

The environmental data for the Reference Product represent the following Catalogue Numbers:

Mechanism Catalogue Numbers	Support Frame Catalogue Numbers	Plate Catalogue Numbers
<ul style="list-style-type: none"> • 5 721 18 • 5 726 18 	<ul style="list-style-type: none"> • 5 760 03 	<ul style="list-style-type: none"> • 5 752 10 • 5 752 11 • 5 752 12 • 5 761 28

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■ CONSTITUENT MATERIALS

This Reference Product contains no substances prohibited by the regulations applicable at the time of its introduction to the market. At the date of publication of this document, this Reference Product does not contain RoHS substances (2002/95/EC and its revision 2011/65/EU), and no substances appearing on the list of substances that are candidate for authorization of the European Reach regulation (REACH - article 33.1).

Total weight of Reference Product		129 g unit packaging included			
Plastics as % of weight		Metals as % of weight		Other as % of weight	
Polycarbonates (PC)	38.3%	Steel	29.9%	Titanium Dioxide (TiO2)	0.5%
Polyamide 66	7.0%	Brass	6.5%	Glass fibre	0.2%
Polyamide (PA 6)	0.4%	Zinc (Zn)	0.4%	Carbon black	0.1%
Polytetrafluoroethylene	0.1%				
				Other (miscellaneous)	0.2%
				Packaging as % of weight	
				Cardboard	13.0%
				Low density polyethylene	2.4%
				Polypropylene	0.9%
				Ink (unspecified)	0.1%
Total plastics	45.8%	Total metals	36.8%	Total other and packaging	17.4%

Estimated recycled material content: 25% by mass



■ MANUFACTURE

The Reference Product comes from sites that has received ISO 14001 certification.



■ DISTRIBUTION

Products are distributed from logistics centres located with a view to optimize transport efficiency. The Reference Product is therefore transported over an average distance of 250 km by road and 100 km by boat from our warehouse to the local point of distribution into the market in Great Britain and Ireland.

Packaging is compliant with European directive 2004/12/EC concerning packaging and packaging waste. At the packaging end of life, its theoretical recycling potential is of 100% and its energy recovery potential is of 100% (in % of the mass of the packaging).



■ INSTALLATION

Installation components not delivered with the product are not taken into account.



■ USE

Servicing and maintenance

Under normal conditions of use, this type of product requires no servicing or maintenance.

Consumable

No consumables are necessary to use the Reference Product.

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END OF LIFE

• **Non-hazardous waste:** 108 g

• **Hazardous waste:**

No hazardous waste comes from this Reference Product.

• **Theoretical recycling potential:**

The theoretical recycling potential of a product is the percentage of material that can be recycled using existing techniques. It takes no account of the existence or lack of recycling services, which are highly dependent on the local situation.

This Reference Product contains 99% by weight of potentially recyclable material (excluding packaging):

- Plastic materials : 55%
- Metal materials : 44%

• **Energy recovery potential:**

Energy recovery consists in using the calories contained in waste by burning it and recovering the energy produced, for example: to heat buildings or to produce electricity. The process uses the converting energy contained in the waste, 55% of the product mass can be recycled with energy recovery.



ENVIRONMENTAL IMPACTS

The evaluation of environmental impacts examines the stages of the Reference Product life cycle: manufacturing, distribution, installation, use and end of life. They are representative from products marketed and used in Great Britain and Ireland.

The following modelling elements were taken into account:

Manufacture	Unit packaging taken into account. As required by the "PEP ecopassport" programme all transports for the manufacturing of the Reference Product, including materials and components, has been taken into account.
Distribution	Transport between the last Group distribution centre and an average delivery to the sales area.
Installation	Installation components not delivered with the product are not taken into account.
Use	<ul style="list-style-type: none"> • Maintenance: under normal conditions of use, this type of Reference Product requires no servicing or maintenance. • No consumables are necessary to use the Reference Product. • Product category: passive product. • Use scenario: non-continuous operation during 20 years at 30% of rated load, for 30% of the time. <p>This modelling duration does not constitute a minimum durability requirement.</p> <ul style="list-style-type: none"> • Energy model: Electricity (Great Britain) / 2002.
End of life	In view of the data available on the date of creation of the document, and in accordance with the requirements of the PCR of the 'PEP ecopassport' programme, transport of the Reference Product by road only once, over a distance of 1000 km, to a processing site at end of life was counted.
Software used	EIME V5 and its database «Legrand-2012-10-31 version 3» made from the database «CODDE-2012-07»

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ENVIRONMENTAL IMPACTS continued

			Total for Life cycle		Raw material and manufacture		Distribution		Installation		Use		End of life	
Mandatory indicators	Contribution to greenhouse effect		2.64E+01	kg~CO ₂	8.11E-01	3%	3.89E-03	<1%	0.00E+00	0%	2.55E+01	97%	9.73E-03	<1%
	Damage to the ozone layer		4.01E-06	kg~CFC-11	2.38E-07	6%	2.68E-09	<1%	0.00E+00	0%	3.76E-06	94%	6.90E-09	2%
	Eutrophisation of water		3.24E-04	kg~PO ₄ ³⁻	1.36E-04	42%	6.30E-08	<1%	0.00E+00	0%	1.88E-04	58%	1.62E-07	<1%
	Photochemical ozone formation		1.59E-03	kg~C ₂ H ₄	2.46E-04	15%	3.29E-06	1%	0.00E+00	0%	1.34E-03	84%	8.46E-06	3%
	Acidification of the air		4.51E-03	kg~H+	1.23E-04	3%	5.70E-07	<1%	0.00E+00	0%	4.39E-03	97%	1.29E-06	<1%
	Total energy consumed		4.57E+02	MJ	1.27E+01	3%	4.79E-02	<1%	0.00E+00	0%	4.45E+02	97%	1.23E-01	<1%
	Consumption of water		6.97E+01	dm ³	6.45E+00	9%	4.54E-03	<1%	0.00E+00	0%	6.32E+01	91%	1.17E-02	<1%

Optional indicators	Depletion of natural resources		9.90E-16	y ⁻¹	5.37E-16	54%	6.53E-20	<1%	0.00E+00	0%	4.54E-16	46%	1.68E-19	<1%
	Toxicity of the air		5.50E+06	m ³	2.17E+05	4%	8.25E+02	<1%	0.00E+00	0%	5.28E+06	96%	1.91E+03	<1%
	Toxicity of the water		4.76E+00	m ³	3.61E-01	8%	5.19E-04	<1%	0.00E+00	0%	4.40E+00	92%	1.34E-03	<1%
	Production of hazardous waste		1.13E-02	kg	8.68E-03	77%	1.41E-06	<1%	0.00E+00	0%	2.65E-03	23%	3.63E-06	<1%

The environmental impacts of the Reference Product are representative of the products covered by the PEP which therefore constitutes an homogeneous environmental family.

5 761 28: take the same values as the Reference Product.

5 726 18 - 5 752 11- 5 752 12: related to the Reference Product. the Hazardous Waste Production indicateur has to be multiplied by 1.2 (% excepted) and the Photochemical Ozone Creation indicator has to be multiplied by 1.3 (% excepted), for manufacturing phase.

The values of these impacts are valid for the context specified in this document. They must not be used directly to draw up the environmental balance sheet for the installation.

Registration number: LGRP-2012-149-V1-en	Drafting rule: PEP-PCR-ed2-FR-2011 12 09
Authorisation number of checker: VH02	Programme information: www.pep-ecopassport.org
Date of issue: 12-2012	Validity period: 4 years
Independent verification of the declaration and data, in accordance with ISO 14025: 2006	
Internal: <input checked="" type="checkbox"/> External:	
In accordance with ISO 14025: 2006 Type III environmental declaration	
The critical review of the PCR was conducted by a panel of experts chaired by J.Chevalier CSTB	
The elements of the present PEP cannot be compared with elements from another programme	

